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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,896	04/27/2005	Jean-Francois Pfister	16824-6	9334

52450 7590 07/16/2007  
KRIEG DEVAULT LLP  
ONE INDIANA SQUARE  
SUITE 2800  
INDIANAPOLIS, IN 46204-2079

EXAMINER
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ROST, ANDREW J

ART UNIT	PAPER NUMBER
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3753

MAIL DATE	DELIVERY MODE
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07/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/532,896

Applicant(s)

PFISTER ET AL.

Examiner

Andrew J. Rost

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is in response to the amendment filed on 4/19/2007. Claims 1-6 have been previously cancelled. Claim 7 was amended. Presently, claims 7-12 are pending.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the valve seat must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bock (4,393,319) in view of Akkerman (5,195,721).

Regarding claim 7, Bock discloses an actuator having a motor portion (coils 46, 48) and an actuator device portion having a rotatable member (62) that is rotated by the motor portion and has threads (114) to cause a linear displacement of a bolt (220, threads of bolt are 115), an axially compressible spring (116) that is located between a head (22) and a casing (52) with the valve head contacting a valve seat (20) in a closed position and the bolt being reversible (as the rotor rotates, the bolt is caused to move in one direction and when the rotor is rotated in the opposite direction, the bolt is moved in a direction opposite the first direction and is therefore reversible). Bock does not expressly disclose the valve closes under the condition of a power failure. However, Akkerman teaches a fail safe valve actuator that when power fails, a spring moves the valve stem in the other direction to move the valve member to a fail safe position (abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the actuator of Bock with the fail safe

arrangement as taught by Akkerman in order to allow the valve head to return to a fail safe position in the case of power failure.

In regards to claim 9, Bock discloses placing a spring of a linear actuator between the valve head and around a portion of the casing in order to stabilize and secure the spring to the casing.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bock in view of Akkerman and further in view of Jones et al. (2,247,090).

Bock in view of Akkerman discloses a linear actuator having a motor, and actuator device portion, a rotatable member with a threaded portion and a spring located between the actuator casing and valve head. The modified Bock reference does not disclose the threaded bolt to include at least two threads. However, Jones et al. teach having screw threads at multiple pitch so that the valve head may be moved from a full open to a full closed position in less than a full turn of the screw (page 2, right hand column, lines 35-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the bolt of the modified Bock reference with screw threads at multiple pitch so that the valve head may be moved from a full open to a full closed position in less than a full turn of the bolt.

6. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bock in view of Akkerman and further in view of Hutchins (5,146,126).

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In regards to claim 10, Bock in view of Akkerman discloses a linear actuator having a motor, and actuator device portion, a rotatable member with a threaded portion and a spring located between the actuator casing and valve head. The modified Bock reference does not disclose a partition wall between the motor portion and the actuator portion. However, Hutchins teaches the use of an isolation tube placed between a stator and a rotor of an actuator in order to isolate hydraulic fluid from the motor portion (col. 2, lines 63-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to place an isolation tube as taught by Hutchins between the motor portion and rotor portion of Kobashi et al. in order to isolate the motor portion from hydraulic fluid.

In regards to claims 11 and 12, the modified Bock reference discloses placing bearings, cover, rotatable member and a holding member for supporting the valve shaft in the isolation tube and being held by an interference fit.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 7-12 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew J. Rost whose telephone number is 571-272-

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2711. The examiner can normally be reached on 7:00 - 4:30 M-Th and 7:00 - 12:00 Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on 571-272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJR, ASR 3 July 2007



ERIC KEASEL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700